

We Claim:

1. An apparatus for at least one of loading and unloading goods units to and from a transport compartment, comprising:

at least one conveying unit being at least partly inserted into the transport compartment and simultaneously conveying a plurality of goods units therein.

2. The apparatus according to claim 1, wherein said conveying unit is installed in a loading region.

3. The apparatus according to claim 1, wherein:

the goods units have a base;

said conveying unit has at least one gripping unit and at least one lifting unit; and

at least one of said gripping unit and said lifting unit lifts the goods units off of the base.

4. The apparatus according to claim 3, wherein said gripping unit is at least two gripping units disposed one after another in a direction of loading and unloading.

5. The apparatus according to claim 3, wherein:

said conveying unit has at least one guide and support unit;
and

said gripping unit is operatively connected to said guide and support unit and is inserted into the transport compartment.

6. The apparatus according to claim 5, wherein:

said gripping unit has pick-up region; and

said guide and support unit is disposed above said pick-up region.

7. The apparatus according to claim 5, wherein:

said conveying unit is installed in a loading region; and

said guide and support unit is building ceiling mountable.

8. The apparatus according to claim 6, wherein:

said conveying unit is installed in a loading region; and

said guide and support unit is building ceiling mountable.

9. The apparatus according to 5, wherein said gripping unit is mounted displaceably on said guide and support unit.

10. The apparatus according to claim 9, wherein said guide and support unit has:

an end pointing in a direction of the transport compartment;
and

a supporting element disposed at least at said end.

11. The apparatus according to claim 3, wherein said gripping unit has at least a second degree of freedom of movement in addition to a first degree of freedom of movement.

12. The apparatus according to claim 3, wherein said gripping unit moves with at least two degrees of freedom.

13. The apparatus according to claim 12, further comprising a crossmember, said gripping unit being mounted to move transversely with respect to a direction of loading and unloading over said crossmember.

14. The apparatus according to claim 11, wherein said gripping unit moves freely with regard to at least one degree

of freedom during at least one of a loading operation and an unloading operation.

15. The apparatus according to claim 13, wherein said gripping unit moves freely with regard to at least one degree of freedom during at least one of a loading operation and an unloading operation.

16. The apparatus according to claim 1, wherein said conveying unit has supporting rollers for supporting at least one goods unit.

17. The apparatus according to claim 1, wherein transport compartment is a commercial motor vehicle.

18. In a commercial motor vehicle, an apparatus for at least one of loading and unloading goods units to and from a transport compartment of the vehicle, the apparatus comprising:

at least one conveying unit at least partly inserted into the transport compartment and simultaneously conveying a plurality of goods units therein.

19. An apparatus for at least one of loading and unloading goods units to and from a transport compartment in a loading

and unloading direction, the goods units having a base, the apparatus comprising:

at least one conveying unit:

being at least partly inserted into the transport compartment and simultaneously conveying a plurality of goods units therein;

having:

at least two gripping units disposed one after another in the loading and unloading direction for insertion into the transport compartment;

at least two lifting units for lifting the goods units off of their base; and

at least one guide and support unit operatively connected to said gripping unit.

20. The apparatus according to claim 1, wherein said conveying unit one of:

is installed fixedly in a loading region; and

is movable upon supporting rollers in the loading region.

21. The apparatus according to claim 19, wherein:

at least one of said gripping units has pick-up region; and

said guide and support unit is disposed above said pick-up region.

22. The apparatus according to claim 21, wherein:

said conveying unit is installed fixedly in a loading region of a building; and

said guide and support unit is to be mounted on a ceiling of the building.

23. The apparatus according to 19, wherein at least one of said gripping units is mounted displaceably on said guide and support unit.

24. The apparatus according to claim 19, wherein said guide and support unit has:

an end pointing in a direction of the transport compartment; and

a supporting element disposed at least at said end.

25. The apparatus according to claim 19, wherein said gripping units move with at least two degrees of freedom.

26. The apparatus according to claim 19, further comprising a crossmember, said gripping units being mounted to move transversely with respect to the loading and unloading direction over said crossmember.

27. The apparatus according to claim 19, wherein said gripping units move freely with regard to at least one degree of freedom during at least one of a loading operation and an unloading operation.

28. The apparatus according to claim 19, wherein said conveying unit has supporting rollers for supporting at least one goods unit.

29. The apparatus according to claim 19, wherein transport compartment is a commercial motor vehicle.

30. A method of at least one of loading and unloading a transport compartment, which comprises:

providing an apparatus for at least one of loading and unloading goods units to and from the transport compartment with at least one conveying unit;

at least partly inserting the conveying unit into the transport compartment and simultaneously conveying a plurality of the goods units therein.

31. A method of at least one of loading and unloading a transport compartment with goods units having a base, which comprises:

providing an apparatus for at least one of loading and unloading the goods units to and from the transport compartment in a loading and unloading direction with at least one conveying unit;

disposing at least two gripping units one after another in the loading and unloading direction on the conveying unit;

providing the conveying unit with at least two lifting units for lifting the goods units off of their base;

operatively connecting at least one guide and support unit to said gripping units; and

at least partly inserting the conveying unit and at least one of the gripping units into the transport compartment and simultaneously conveying a plurality of the goods units therein.